



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,256	07/03/2003	Gerhard Reichert	1663-AI	4893
7590 Fred H. Zollinger III P.O. Box 2368 North Canton, OH 44720				
EXAMINER				
AMIRI, NAHID				
ART UNIT		PAPER NUMBER		
3679				
MAIL DATE		DELIVERY MODE		
09/16/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/613,256

**Applicant(s)**

REICHERT, GERHARD

**Examiner**

NAHID AMIRI

**Art Unit**

3679

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 70-75 and 94-109 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 70-75 and 94-109 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

In view of Applicant's Amendment received 13 July 2010, amendments to the claims have been entered. Claims 1-69 and 76-93 are canceled. Claims 70-75 and 94-109 are pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 94-109 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 94, lines 9-10, the new limitation of "carrying the adhesive to an inner surface of one of the glass panes", considers as a new matter, since there is no support in original specification. Same applies to claim 105, lines 10-11.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

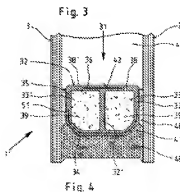
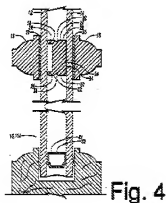
**Claims 70-75 and 94-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,345,743 Baier in view of US Patent No. 5,460,862 Roller.**

With respect to claims 70-74, Baier discloses a simulated divided lite insulating glazing unit (Fig. 4) comprising first and second spaced glass panes (12, 14) spaced apart by a perimeter

spacer (12), the first and second glass panes (12, 14) and spacer (12) defining a gap, a resilient foam internal muntin bar (22) disposed inside the gap the internal muntin bar (22) dividing the gap into separate portions to provide a divided-lite appearance to the glazing unit; the internal muntin bar (22) having a body having a longitudinal direction, the body having opposed base walls (24) separated by the height of the body; and wherein (column 2, lines 60-64) that the body of muntin bar (22) is fabricated from a foam polymer and the foam includes a desiccant, one of the base walls carrying an adhesive (34), the body being connected to an inner surface of one of the glass panes (12, 14) with the adhesive (34); and wherein the base wall of the body having the adhesive (34) defining a body width, the body width being greater than the body height.

Baier fails to disclose that the body defining at least one insulating cavity, the insulating cavity being surrounded by the body; and the body defines a plurality of insulating cavities; each of the insulating cavities being elongated in the longitudinal direction.

Roller teaches a window unit (Fig. 4) having glass panes (2, 3), a muntin bar (constituted by a spacing elements 31) between glass panes (2 and 3); the muntin bar (31) defining a body (32), wherein the body (32) defining at least one insulating cavity (33), the insulating cavity (33) being surrounded by the body (32); wherein the body (32) defining a plurality of insulating cavities (33, 33'); and the cavities (33, 33') are spaced apart from one another; the cavities contain a drying agent for absorbing and preventing moisture between the glass panes. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the muntin bar of Baier with a plurality of cavities containing a drying agent as taught by Roller in order to absorb and prevent moisture between the glass panes.



With respect to claims 75 and 100, Baier and Roller fail to disclose that each insulating cavity has a width, the space between the cavities being equal to or greater than the width of either cavity.

It is well known in the art that the insulating cavity come in variety of widths; also to have three elongated cavities instead of two for the reason well known in the art. Therefore, it would have been an obvious matter of design choice to provide different spaces between insulating cavities of Baier in view of Roller and provide the body with more than two insulating cavities such as three, since applicant has not disclosed that specific spacing and that specific number of insulating cavities solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Roller's invention.

With respect to claims 94, Baier discloses a simulated divided-lite insulating glazing unit (Fig. 4) comprising first and second spaced glass panes (12, 14) spaced apart by a perimeter spacer (12), the first and second glass panes (12, 14) and spacer (12) defining a gap, a resilient foam internal muntin bar (22) disposed inside the gap; the internal muntin bar (22) dividing the gap into separate portions to provide a divided-lite appearance to the glazing unit; the internal muntin bar (22) having a body having a longitudinal direction; one of the base walls carrying an adhesive (34) that connects the base wall to an inner surface of one of the glass panes (12, 14), the base wall carrying the adhesive (34) defining a body width; and wherein the body material having a cross sectional area when measured along a cross section taken perpendicular to the longitudinal direction of the body.

Baier fails to disclose that the body defining at least one open insulating cavity; the insulating cavity having a cross sectional area measured along a cross section taken through the cavity perpendicular to the longitudinal direction of the body; the insulating cavity being surrounded by the body when viewed in cross section; and the body material being larger than the cross sectional area of the insulating cavity wherein the body is capable of being rolled into a roll for storage and shipping without the body being collapsed and then unrolled for application to the glass.

Roller teaches a window unit (Fig. 4) having glass panes (2, 3), a muntin bar (constituted by a spacing elements 31) between glass panes (2 and 3); the muntin bar (31) defining a body (32) having a base walls (35, 37), the base walls (35, 37) carrying an adhesive (40'), one of the base walls (35) carrying the adhesive (40') defining a body width; the body (32) defining at least one open insulating cavity (33); the insulating cavity (33) having a cross sectional area measured along a cross section taken through the cavity perpendicular to the longitudinal direction of the body (32); and the body material being larger than the cross sectional area of the insulating cavity (33); the cavities contain a drying agent for absorbing and preventing moisture between the glass panes. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the muntin bar of Baier with a plurality of cavities containing a drying agent as taught by Roller in order to absorb and prevent moisture between the glass panes.

With respect to claims 95-99, Baier fails to disclose that the insulating cavity is elongated in the longitudinal direction; the insulating cavity is continuous in the longitudinal direction; the body defines a plurality of insulating cavities, each of the insulating cavities being elongated in the longitudinal direction; the insulating cavities are spaced from one another with a portion of the body material disposed between each pair of cavities; and wherein the body defines three elongated insulating cavities.

Roller teaches (Fig. 4) that the insulating cavity (33) being surrounded by the body (32) when viewed in cross section; and the body material having a cross sectional area when measured along a cross section taken perpendicular to the longitudinal direction of the body (32); the insulating cavity (33) is elongated in the longitudinal direction; the insulating cavity (33) is continuous in the longitudinal direction; the body defines a plurality of insulating cavities (33, 33'), each of the insulating cavities (33, 33') being elongated in the longitudinal direction; the insulating cavities are spaced from one another with a portion (32') of the body material disposed between each pair of cavities (33, 33'); the cavities contain a drying agent for absorbing and preventing moisture between the glass panes. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the muntin bar of Baier with a plurality of cavities containing a drying agent as taught by Roller in order to absorb and prevent moisture between the glass panes.

It is well known in the art that the cross sectional area of the body material and insulating cavities come in variety sizes for the reason well known in the art. Therefore, it would have been an obvious matter of design choice to provide the body material and insulating cavities of Baier with specific cross section, since applicant has not disclosed those cross sections solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Roller's invention.

With respect to claim 101, 102, 107, and 108, Baier discloses (column 2, lines 60-64) that the body being formed from a body material; wherein that the body of muntin bar (22) is fabricated from a foam polymer and the foam includes a desiccant.

With respect to claim 103, it should be noted that in a product-by process claim it is the patentability of the product, and not the recited process steps that is to be determined even if only process steps are recited. All that is required of the claim is that the foam body is capable of being rolled into a roll for storage and shipping and then unrolled for application to the glass. Accordingly the foam body disclosed by Baier is interpreted to read on such claim.

With respect to claim 104 and 109, Baier fails to disclose that the body defines three elongated insulating cavities.

Roller teaches (Fig. 7) that the body defines three elongated insulating cavities (113a, 113b, 113c); the cavities contain a drying agent for absorbing and preventing moisture between the glass panes. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the muntin bar of Baier with a plurality of cavities containing a drying agent as taught by Roller in order to absorb and prevent moisture between the glass panes.

With respect to claims 105 and 106, it should be noted that in a product-by process claim it is the patentability of the product, and not the recited process steps, that is to be determined even if only process steps are recited. All that is required of such claims is that the foam body is capable of being rolled into a roll for storage and shipping and then unrolled for application to the glass. Accordingly the foam body disclosed by Baier is interpreted to read on such claims.

As to claims 105 and 106, Baier discloses a simulated divided- lite insulating glazing unit (Fig. 4) comprising first and second spaced glass panes (12, 14) spaced apart by a perimeter spacer (12), the first and second glass panes (12, 14) and spacer (12) defining a gap, an internal

muntin bar (22) disposed inside the gap; the internal muntin bar (22) dividing the gap into separate portions to provide a divided-lite appearance to the glazing unit; the internal muntin bar (22) having a body having a longitudinal direction; the body having opposed base walls separated by the height of the body; one of the base walls carrying an adhesive (34) that connects the base wall to an inner surface of one of the glass panes (12, 14), the base wall carrying the adhesive (34) defining a body width.

Baier fails to disclose that the body defining a plurality of insulating cavity; each of the insulating cavities being elongated in the longitudinal direction; each insulating cavity being surrounded by the body material when viewed in cross section; each pair of insulating cavities being spaced from one another with a portion of the body material; and each insulating cavity having a width of either insulating cavity and each insulating cavity is continuous in the longitudinal direction.

Roller teaches a window unit (Fig. 4) having glass panes (2, 3), a muntin bar (constituted by a spacing elements 31) between glass panes (2 and 3); the muntin bar (31) defining a body (32) defining a plurality of insulating cavities (33, 33'); each of the insulating cavities (33, 33') being elongated in the longitudinal direction; each insulating cavity (33, 33') being surrounded by the body material when viewed in cross section; each pair of insulating cavities (33, 33') being spaced from one another with a portion of the body material and each insulating cavity (33, 33') having a width of either insulating cavity (33, 33) and each insulating cavity (33, 33') having a width of either insulating cavity (33, 33') and each insulating cavity (33, 33') is continuous in the longitudinal direction; the cavities contain a drying agent for absorbing and preventing moisture between the glass panes. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the muntin bar of Baier with a plurality of cavities containing a drying agent as taught by Roller in order to absorb and prevent moisture between the glass panes.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 70-75 and 94-109 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues on page 7, of his remarks, that because a restriction was previously required in this application between claims drawn a muntin bar and claims drawn to a spacer, then this means that no teaching involving features found in a spacer may be applied to a muntin bar because the two elements are patentably distinct.

This argument is not persuasive. Specifically, it should be noted that restriction practice pertains to the claims of any one application wherein two or more independent and distinct inventions are claimed in the application. "Restriction" is the practice of requiring applicant to elect a single one of these inventions. Further, restriction may be properly required when the claims of an application define inventions, which are able to support separate patents. A restriction between two such claimed inventions in a single application neither implies nor results in the entire body of prior art references for the non-elected invention being disqualified from consideration when considering the patentability of the elected invention. Accordingly, the fact that there was a restriction in this application is of little consequence and has no bearing on the propriety of the combination of references relied upon to reject claims drawn to the elected invention.

With respect to Roller reference Applicant argues that a prima facie case of obviousness has not been established, because the spacer of Roller is not relevant to the currently-claimed muntin inventions than the Applicant's spacer inventions. Therefore, the claimed muntin inventions are patentable over the cited combination of references and the combination is not proper, since one of ordinary skill in the art would thus not look to a spacer disclosure (Roller) to modify the muntin disclosure of Baier. Furthermore, Applicant argues that the claimed muntins of the invention are rolled for storage as recited in claims 94 and 105; and also, the muntins of the inventions are pressed onto glass with pressurized roller that crush the muntins during the application process which these configurations to be successful in these application processes. Furthermore, Applicant argues that these configurations in the Roller spacer have been found to be unsuccessful as discussed in the background of the invention section. This is not persuasive.

Roller discloses a spacer, which clearly reads on the structure of the Applicant claimed invention. Accordingly, Applicant should note that it is the patentability of the recited product that is to be determined and not how the apparatus used i.e., "rolled". Therefore, with respect to

the rejection of the claims 94 and 105, the applied prior art Roller meet the limitations of the insulating glazing unit of Applicant's invention.

Further, it should be noted that the recitation in the preamble has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

Furthermore, the test of obviousness is what combined teachings would have fairly suggested to one of ordinary skill in the art, *In re Keller*, 208 USPQ 871 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skill in the art would reasonably be expected to draw therefrom, *h7 re Preda*, 159 USPQ 342 (CCPA 1968). Further, one is to presume skill, not a lack thereof, on the part of one of ordinary skill in the art, *In re Sovish*, 226 USPQ 771 (CAFC 1985). Further, it should also be noted that there is no requirement for motivation be explicitly found in the references themselves, *In re Keller*, supra, and an examiner may find motivation in the nature of the problem to be solved.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nahid Amiri  
Examiner  
Art Unit 3679  
September 2, 2010

/Michael P. Ferguson/  
Primary Examiner, Art Unit 3679